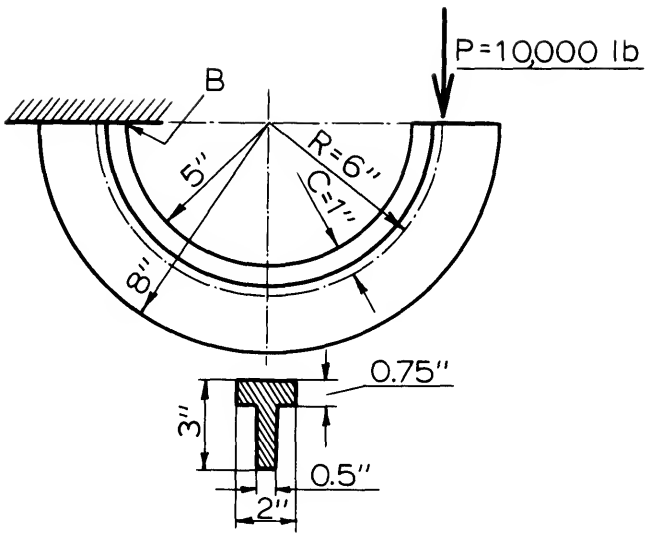

Fig. 28.4 Machine bracket geometry for Design Problem 28.1.

Design Problem 28.2

A machine clamp having a form of a half circle has the same cross-sectional geometry as that analyzed in Design Problem 28.1. Assuming that the load $P = 12{,}000$ lb acts in the direction shown in Fig. 28.5, calculate the maximum hook-type stress in the clamp, using the exact and approximate methods of the analysis given in this section.

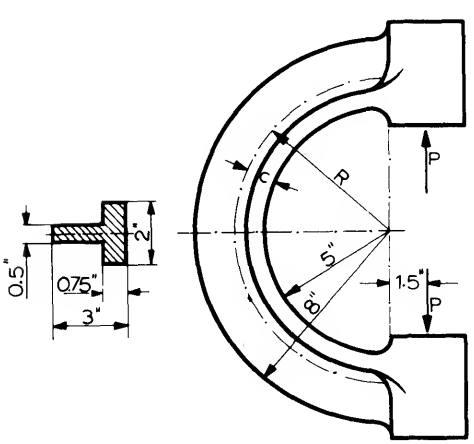

Fig. 28.5 Half-circle clamp.